

EXHIBIT 41

CONFIDENTIAL

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

CISCO SYSTEMS, INC.,)
Plaintiff,)
vs.) Civil Action No.:
ARISTA NETWORKS, INC.,) 5:14-cv-05344-BLF (PSG)
Defendant.)
_____)

CONFIDENTIAL

VIDEOTAPED DEPOSITION OF DEVADAS PATIL
Palo Alto, California
Sunday, February 21, 2016
Volume 1

Reported by:
RACHEL FERRIER, CSR No. 6948
Job No. 2223126

PAGES 1 - 234

Page 1

CONFIDENTIAL

1 A Yes. 02:00PM

2 Q How were those individuals listed on the cover 02:00PM

3 page of Exhibit 317 involved in coming up with the 02:00PM

4 syntaxes for the commands listed on Exhibit 316? 02:01PM

5 A Well, they -- they -- they're also quite 02:01PM

6 experienced in developing these -- these -- these types 02:01PM

7 of commands, and they give an initial opinion on whether 02:01PM

8 to take it to the next level and get it -- get it 02:01PM

9 reviewed by parser-police, so there were initial -- 02:01PM

10 initial -- there would basically be an initial 02:01PM

11 verification of the usability and extensibility criteria 02:01PM

12 that we talked about earlier. 02:01PM

13 Q Looking at the cover page of Exhibit 317 -- 02:01PM

14 A Yes. 02:02PM

15 Q -- was Mr. Deepak Kumar involved in creating the 02:02PM

16 command syntaxes for the commands listed on Exhibit 316? 02:02PM

17 MR. CANNON: Objection; vague. 02:02PM

18 THE WITNESS: I mean, in -- in all as a reviewer, 02:02PM

19 yes, but I came up with the initial proposal. 02:02PM

20 BY MR. WONG: 02:02PM

21 Q Is that true for each of the individuals listed 02:02PM

22 on the cover of Exhibit 317? 02:02PM

23 MR. CANNON: Objection; vague. 02:02PM

24 THE WITNESS: For Exhibit 317, these -- 02:02PM

25 these were -- these were engineers in my immediate 02:02PM

Page 163

CONFIDENTIAL

1 group, and they -- I don't recall doing any changes from 02:02PM
2 their feedback at -- at -- for the CLI. 02:02PM
3 BY MR. WONG: 02:02PM
4 Q And when you say "for the CLI," you are referring 02:02PM
5 to the commands listed on Exhibit 317; correct? 02:02PM
6 A That's correct, yes. 02:02PM
7 Q If you look at Exhibit 316, next to the command 02:02PM
8 "lldp receive" -- 02:02PM
9 A Mm-hmm. 02:02PM
10 Q -- in the column next to that, it lists your name 02:03PM
11 and a Mr. Bruce Pinsky. 02:03PM
12 Do you see that? 02:03PM
13 A Yes. 02:03PM
14 Q Who is Bruce Pinsky? 02:03PM
15 A He must be part of -- he was -- he was not in our 02:03PM
16 immediate sister group or in our business unit. I don't 02:03PM
17 know which group he was part of, but I suppose he 02:03PM
18 provided suggestions in the parser-police areas of the 02:03PM
19 development activity. 02:03PM
20 Q And do you recall what Mr. Pinsky's contribution 02:03PM
21 was to the syntax of the "lldp receive" command? 02:03PM
22 A I think my initial proposal was slightly verbose 02:03PM
23 or somewhat redundant in the way it was laid out, so he 02:03PM
24 must have -- he must have suggested that I truncate some 02:04PM
25 of it, unless there was -- unless I saw a need for 02:04PM

Page 164

CONFIDENTIAL

1 extensibility at that particular level of the command 02:04PM
2 structure, and my recollection is that I -- I did not 02:04PM
3 see a need for extensibility right there, and, 02:04PM
4 therefore, we had to rearrange the -- the command flow. 02:04PM

5 Q When you were working at Cisco, do you recall 02:04PM
6 seeing a document called the "Parser-Police Manifesto"? 02:04PM

7 A I don't know. 02:04PM

8 Q Do you recall seeing a document that set forth 02:05PM
9 guidelines and rules regarding the addition of new 02:05PM
10 commands to Cisco IOS? 02:05PM

11 A Yes. 02:05PM

12 MR. CANNON: If we are going to move to another 02:05PM
13 document, can we take a break? It's been a little over 02:05PM
14 an hour. 02:05PM

15 MR. WONG: Sure. 02:05PM

16 THE VIDEOGRAPHER: We are going off the record at 02:05PM
17 2:05 p.m. This is the end of Media No. 3. 02:05PM

18 (Recess taken.) 02:05PM

19 THE VIDEOGRAPHER: We are on the record at 02:11PM
20 2:11 p.m. This is the beginning of Media 4 in the 02:11PM
21 deposition of Devadas Patil. 02:11PM

22 (Exhibit 318 was marked for 02:11PM
23 identification by the Court Reporter.) 02:11PM

24 BY MR. WONG: 02:11PM

25 Q The Court Reporter marked, as a new exhibit, 02:11PM

Page 165

CONFIDENTIAL

1 hierarchy. 02:38PM

2 If you want a strict hierarchy, you would have an 02:38PM

3 intermediate node and list all the specific options, but 02:38PM

4 since there aren't any, I might have taken this 02:38PM

5 position; although, it's -- it's -- it may seem a little 02:38PM

6 bit weak for in terms of future-proofing things. 02:38PM

7 So there's a -- there's a -- there's a balance 02:39PM

8 between future-proofing and -- and verbosity, and -- and 02:39PM

9 the more you try to feature-proof, the more verbose you 02:39PM

10 can become, so it's more of a subjective column how you 02:39PM

11 design, keeping all of these in mind, yeah. 02:39PM

12 Q Thank you. 02:39PM

13 And after letter "d" on Exhibit 321, you say, 02:39PM

14 quote: It is more intuitive for first-time users, end 02:39PM

15 quote. 02:39PM

16 Do you see that? 02:39PM

17 A Yes. 02:39PM

18 Q What did you mean by that? 02:39PM

19 A This means that -- that user interface should 02:39PM

20 flow naturally in a sense that if I've never used 02:39PM

21 anything similar, I should be pretty much able to -- I 02:39PM

22 should be able to come in and type in a reasonable 02:39PM

23 keyword for things and get help on it and be able to 02:40PM

24 complete a configuration within a reasonable amount of 02:40PM

25 time rather than going through hours of research on it. 02:40PM

Page 186

CONFIDENTIAL

1 Q And that approach that you just described, did 02:40PM
2 you apply that approach for the commands that are listed 02:40PM
3 in Exhibit 316? 02:40PM

4 MR. CANNON: Objection; vague. 02:40PM

5 THE WITNESS: The -- what is 316? This is the 02:40PM
6 one -- okay. This -- it -- it certainly influenced our 02:40PM
7 structure for these commands. Yeah, so intuitiveness, 02:40PM
8 extensibility, usability, aesthetics are all factors 02:40PM
9 that we considered. 02:40PM

10 BY MR. WONG: 02:41PM

11 Q Let's look at Exhibit 316 now, Mr. Patil. 02:41PM

12 A Yeah. 02:41PM

13 Q Starting with the first command, you were 02:41PM
14 associated with "clear lldp counters." 02:41PM

15 Do you see that? 02:41PM

16 A Yes. 02:41PM

17 Q What function does the "clear lldp counters" 02:41PM
18 command perform? 02:41PM

19 A It's basically a reset, if you will, of all the 02:41PM
20 statistics that have been accumulated over a period of 02:41PM
21 time, and if you want to start off on a clean slate 02:41PM
22 again at a certain period of time on a -- on a certain 02:41PM
23 router or switch, then you could issue that command and 02:42PM
24 it will clear all the statistics. 02:42PM

25 Q And how long did it take you, approximately, to 02:42PM

Page 187

CONFIDENTIAL

1 come up with the syntax of "clear lldp counters"? 02:42PM

2 MR. CANNON: Objection; vague. 02:42PM

3 THE WITNESS: Oh, just that one command? 02:42PM

4 MR. WONG: Mm-hmm. 02:42PM

5 THE WITNESS: I don't know, 15 minutes. 02:42PM

6 BY MR. WONG: 02:42PM

7 Q Okay. How long did it take you, approximately, 02:42PM

8 to do the source code writing to implement the 02:42PM

9 functionality for the "clear lldp counters" command? 02:42PM

10 MR. CANNON: Objection; vague, assumes facts not 02:42PM

11 in evidence. 02:42PM

12 THE WITNESS: Okay. That would be, again, 02:42PM

13 15 minutes, and I have to add that this is a easiest one 02:42PM

14 to implement. 02:42PM

15 BY MR. WONG: 02:42PM

16 Q For the "clear lldp table" command -- 02:42PM

17 A Mm-hmm. 02:42PM

18 Q -- what functionality does that perform? 02:43PM

19 A That is, again, a reset, but more at the enable 02:43PM

20 level in the sense that, let's say, a device comes up 02:43PM

21 and it discovers ten neighbors and we want to come in 02:43PM

22 and manually reset the table by making it forget all 02:43PM

23 those ten neighbors instantly, then we would use that 02:43PM

24 command. 02:43PM

25 Q And approximately how long did it take you to 02:43PM

Page 188

CONFIDENTIAL

1 come up with the syntax of "clear lldp table"? 02:43PM

2 MR. CANNON: Objection; vague. 02:43PM

3 THE WITNESS: The answer would be very similar to 02:43PM

4 the other "clear" command. 02:43PM

5 BY MR. WONG: 02:43PM

6 Q About 15 minutes? 02:43PM

7 A Yes. 02:43PM

8 Q And did it take you also about 15 minutes to 02:43PM

9 write the underlying source code for the functionality 02:43PM

10 of the "clear lldp table" command? 02:43PM

11 A No. 02:43PM

12 Q How long, approximately, did it take you to come 02:43PM

13 up with the -- strike that. 02:43PM

14 How long, approximately, did it take you to write 02:43PM

15 the source code for the "clear lldp table" command? 02:43PM

16 MR. CANNON: Objection; vague. 02:44PM

17 THE WITNESS: I can't quantify it readily, but it 02:44PM

18 would be, if you tally the total time spent on it, maybe 02:44PM

19 a couple hours, because there is dependencies to handle. 02:44PM

20 It's not as easy as setting a bunch of numbers to zero. 02:44PM

21 BY MR. WONG: 02:44PM

22 Q And for all of the commands listed on 02:44PM

23 Exhibit 316, Mr. Patil, can you describe for me, 02:44PM

24 generally, what type of source code you would need to 02:44PM

25 write to implement the functionality? 02:44PM

Page 189

CONFIDENTIAL

1 MR. CANNON: Objection; compound, vague, lacks 02:44PM
2 foundation, incomplete hypothetical, calls for improper 02:44PM
3 opinion testimony. 02:44PM

4 THE WITNESS: So to clarify the question, what 02:44PM
5 type of code needs to be written to clear the command 02:44PM
6 for the "clear" commands? 02:44PM

7 MR. WONG: No, no. 02:44PM

8 Q So, for example, you know, to write the source 02:44PM
9 code for any of these commands listed on Exhibit 316 -- 02:44PM

10 A Yeah. 02:44PM

11 Q -- what are the types of source code that would 02:44PM
12 need to be written in order to implement them? 02:45PM

13 MR. CANNON: Objection; compound, vague, lacks 02:45PM
14 foundation, incomplete hypothetical, calls for improper 02:45PM
15 opinion testimony. 02:45PM

16 THE WITNESS: The source code is written in C -- 02:45PM
17 C language, and, essentially, all these commands have a 02:45PM
18 callback which can be implemented as a C function, and 02:45PM
19 whenever a user travels to a certain point and they pass 02:45PM
20 tree, that function that gets attached to that node in 02:45PM
21 the tree gets executed, and, basically, it's -- it's 02:45PM
22 given the information about the construct that it's 02:45PM
23 handling, and, at that point, they -- they just -- we 02:45PM
24 just go in and change the fields in there. 02:45PM

25 BY MR. WONG: 02:45PM

Page 190

CONFIDENTIAL

1 MR. CANNON: And because of that, we are going to 02:47PM
2 have a standing objection to questions about this 02:47PM
3 partial document without the sufficient context for it 02:47PM
4 to be reviewed or understood. 02:47PM

5 BY MR. WONG: 02:47PM

6 Q Now, Mr. Patil, I'm just providing this exhibit 02:47PM
7 for you so that you can refresh your recollection, if 02:48PM
8 you need to -- 02:48PM

9 A Mm-hmm. 02:48PM

10 Q -- about what these various commands do. I won't 02:48PM
11 ask you any other questions about this exhibit, but feel 02:48PM
12 free to refer to Exhibit 322 -- 02:48PM

13 A Yeah. 02:48PM

14 Q -- to answer my questions. 02:48PM

15 A Yes. 02:48PM

16 Q So my question that I posed a few minutes ago is: 02:48PM
17 What is the function performed by the "lldp holdtime" 02:48PM
18 command? 02:48PM

19 MR. CANNON: Objection -- 02:48PM

20 THE WITNESS: So. 02:48PM

21 MR. CANNON: -- lacks foundation, document speaks 02:48PM
22 for itself. 02:48PM

23 THE WITNESS: -- after reading, I still cannot 02:48PM
24 completely understand why we did that or what the 02:48PM
25 concept is, because it's been a while since I wrote this 02:48PM

Page 192

CONFIDENTIAL

1 and I've not used it for a long time. 02:48PM

2 But I think it's a request from the sender to the 02:49PM

3 receiver to hold neighbor information, at least for a 02:49PM

4 certain period of time, regardless of whether they get 02:49PM

5 utilized. That's my understanding. 02:49PM

6 BY MR. WONG: 02:49PM

7 Q And how long, approximately, did it take you to 02:49PM

8 come up with the syntax for the "lldp holdtime" command? 02:49PM

9 MR. CANNON: Objection; vague. 02:49PM

10 THE WITNESS: The actual -- the command itself? 02:49PM

11 MR. WONG: The actual -- yes, the syntax of the 02:49PM

12 command. 02:49PM

13 MR. CANNON: Objection; vague. 02:49PM

14 THE WITNESS: 15 minutes. 02:49PM

15 BY MR. WONG: 02:49PM

16 Q Is your answer 15 minutes for all of the commands 02:49PM

17 listed in Exhibit 316? 02:49PM

18 A No. 02:49PM

19 MR. CANNON: Objection; compound and vague. 02:49PM

20 MR. WONG: I'm just trying to save time here, 02:49PM

21 Mr. Patil. 02:49PM

22 Q Okay. What is the function performed by the 02:49PM

23 "lldp receive" command? 02:49PM

24 A Basically, we announce that we are open on the 02:49PM

25 receive channel for that interface. 02:50PM

Page 193

CONFIDENTIAL

1 Q And how long did it take for you to come up with 02:50PM
2 the syntax for that command? 02:50PM
3 MR. CANNON: Objection; vague. 02:50PM
4 THE WITNESS: Several hours because that's where 02:50PM
5 we went back and forth on the extensibility, usability, 02:50PM
6 redundancy, verbosity, and those discussions. 02:50PM
7 BY MR. WONG: 02:50PM
8 Q What is the function performed by the "lldp 02:50PM
9 reinit" command? 02:50PM
10 A It specifies the amount of wait time for the 02:50PM
11 protocol to reinitialize at any point in time. 02:50PM
12 Q And how long did it take for you to come up with 02:50PM
13 the command syntax for the "lldp reinit" command? 02:50PM
14 MR. CANNON: Objection; vague. 02:50PM
15 THE WITNESS: That's -- that one is in the 02:50PM
16 15-minute category. 02:50PM
17 BY MR. WONG: 02:50PM
18 Q Did it also take you approximately 15 minutes to 02:51PM
19 come up with the "lldp run" command? And I'm referring 02:51PM
20 to the command syntax. 02:51PM
21 MR. CANNON: Objection; vague. 02:51PM
22 THE WITNESS: "Lldp run," yes. 02:51PM
23 BY MR. WONG: 02:51PM
24 Q Did it also take you 15 minutes to come up with 02:51PM
25 the syntax for "lldp timer"? 02:51PM

Page 194

CONFIDENTIAL

1 MR. CANNON: Objection; vague. 02:51PM

2 THE WITNESS: I don't know that one because I -- 02:51PM

3 I recall that some of these had a lot of discussion 02:51PM

4 involved, and I -- I can clearly say that transmit and 02:51PM

5 receive fell into that category. 02:51PM

6 BY MR. WONG: 02:51PM

7 Q Of taking longer than 15 minutes? 02:51PM

8 A Longer time, longer than 15 minutes. 02:51PM

9 Q For the other commands listed on Exhibit 316 that 02:51PM

10 are not the "lldp transmit" and "lldp receive" 02:51PM

11 commands -- 02:51PM

12 A Mm-hmm. 02:51PM

13 Q -- do you believe that you spent approximately 02:52PM

14 15 minutes coming up with the command syntax for each of 02:52PM

15 those? 02:52PM

16 MR. CANNON: Objection; vague and compound. 02:52PM

17 THE WITNESS: I would say a good 50 percent of 02:52PM

18 those, but some of the commands I struggle with myself 02:52PM

19 to -- to put out the best initial proposal, so not 02:52PM

20 everything is 15 minutes. Some of them took where I 02:52PM

21 went back and looked at other things and see what's the 02:52PM

22 most usable token to put there and a keyword to put 02:52PM

23 there. 02:52PM

24 BY MR. WONG: 02:52PM

25 Q Which of the commands do you think took longer 02:52PM

Page 195

CONFIDENTIAL

1 than 15 minutes for you to come up with the command 02:52PM
2 syntax, setting aside the "lldp transmit" and "lldp 02:52PM
3 receive" commands. 02:52PM
4 A Right. 02:52PM
5 "Tlv-select." Some of the org-specific ones 02:52PM
6 are -- they are just basically the -- they -- they are 02:53PM
7 straight up describing what they are, so that shouldn't 02:53PM
8 have been long. 02:53PM
9 I would say "tlv-select," "transmit" and 02:53PM
10 "receive," and maybe even "rate" command. Significant 02:53PM
11 thought process involved in -- in coming up with the 02:53PM
12 right keywords. 02:53PM
13 Q I'm sorry, did you say "rate command"? 02:53PM
14 A Yeah, "lldp rate." 02:53PM
15 Q Oh, okay. So I'm looking at Exhibit 316, and I 02:53PM
16 do not believe the "rate" command -- 02:53PM
17 A Oh, oh, I see -- 02:53PM
18 Q -- is -- is part of that. 02:53PM
19 A -- is part of that. Okay. I was looking at 322. 02:53PM
20 So among 316, I would say -- 02:53PM
21 Q Let me just ask the fresh question so that it's 02:53PM
22 clear -- 02:53PM
23 A Yes. 02:53PM
24 Q -- on the record. 02:53PM
25 A Yes. 02:53PM

Page 196

CONFIDENTIAL

1 Q So for the commands listed on Exhibit 316 -- 02:53PM

2 A Yeah. 02:53PM

3 Q -- which of the commands do you believe you spent 02:54PM

4 more than 15 minutes on coming up with the command 02:54PM

5 syntax? 02:54PM

6 A "Transmit" and "receive," the "show" commands, 02:54PM

7 "tlv-select" command, "lldp timer" command, and "lldp 02:54PM

8 reinit" command. 02:54PM

9 Q Approximately how long do you think it took you 02:54PM

10 to come up with the command syntax for the "lldp reinit" 02:54PM

11 command? 02:54PM

12 MR. CANNON: Objection; vague. 02:54PM

13 THE WITNESS: I struggled with it. I'm not 02:54PM

14 particularly happy with the way it is right -- right 02:54PM

15 here. Reading it is kind of a, for lack of a better 02:54PM

16 term, awkward keyword, but I didn't have anything better 02:55PM

17 to say -- to use there, so I might have struggled with 02:55PM

18 it for 45 minutes. 02:55PM

19 BY MR. WONG: 02:55PM

20 Q But do you have an actual memory of spending 02:55PM

21 45 minutes on this command? 02:55PM

22 A Yes. 02:55PM

23 Q Okay. 02:55PM

24 A I mean, I had something else before, and I took 02:55PM

25 it out and rewired the code and etc., yeah. 02:55PM

Page 197

CONFIDENTIAL

1 Q And how long did it take for you, approximately, 02:55PM
2 to come up with the command syntax for "lldp timer"? 02:55PM
3 A That one -- so there's a -- timer. Again, maybe 02:55PM
4 45 minutes to an hour. 02:55PM
5 Q How long did it take you to come up with the 02:55PM
6 command syntax for "lldp tlv-select"? 02:55PM
7 MR. CANNON: Objection; vague. 02:55PM
8 THE WITNESS: Again, the choice of the -- the 02:55PM
9 token was what I spent time on, and I went back, looked 02:56PM
10 at the standard, whether to use underscore, hyphen, or, 02:56PM
11 you know, exactly how it should look and feel, and this 02:56PM
12 is the best I could come up within, like, 45 minutes to 02:56PM
13 an hour. 02:56PM
14 BY MR. WONG: 02:56PM
15 Q And when you say "token," what are you referring 02:56PM
16 to? 02:56PM
17 A The keyword, the -- so "lldp" is a token. 02:56PM
18 "Tlv-select" is a token, so when we pass things and 02:56PM
19 break it into parts, they are called tokens, and it's 02:56PM
20 essentially the -- the -- each -- each word there. 02:56PM
21 Q So was the 45 minutes spent on the "tlv-select" 02:56PM
22 token? 02:56PM
23 A Yeah, I mean, selecting that or putting it 02:56PM
24 together. 02:56PM
25 Q How much time did you spend, for all these 02:56PM

Page 198

CONFIDENTIAL

1 commands, choosing the "lldp" token? 02:56PM

2 A The first token? 02:56PM

3 Q Just -- just -- yes, just the "lldp" token, the 02:56PM

4 first token. 02:56PM

5 A No. That was right out of the box. I mean, I 02:57PM

6 would -- I wouldn't have thought twice about that, but 02:57PM

7 it's only the subcommands and how to make it 02:57PM

8 future-proofed and extensible. That's the part that is 02:57PM

9 hard. 02:57PM

10 Q By the way, when you added the two "clear" 02:57PM

11 commands listed on Exhibit 316, were there other 02:57PM

12 commands that already existed in IOS that used "clear" 02:57PM

13 as the first token? 02:57PM

14 A I -- clear -- yes, I think so. 02:57PM

15 Q And so did you just use the same token that 02:57PM

16 similar commands were already using in IOS? 02:57PM

17 MR. CANNON: Objection; vague, argumentative. 02:57PM

18 THE WITNESS: Yes. 02:57PM

19 BY MR. WONG: 02:57PM

20 Q Now, you testified that the "show" commands took 02:57PM

21 longer than 15 minutes to choose their syntax; is that 02:57PM

22 correct? 02:57PM

23 A Yes. 02:57PM

24 Q How long did it take for you to come up with the 02:57PM

25 command syntax for "show lldp"? 02:57PM

Page 199

1	A	That one was probably half an hour.	02:58PM
2	Q	Why did it take longer than 15 minutes to come up	02:58PM
3		with the syntax of "show lldp"?	02:58PM
4	MR. CANNON:	Objection; vague.	02:58PM
5	THE WITNESS:	Because I struggled to come up with	02:58PM
6		a -- with the right set of keywords that are very	02:58PM
7		intuitive and differentiated, and, you know, that's what	02:58PM
8		took time.	02:58PM
9	BY MR. WONG:		02:58PM
10	Q	How long did it take for you to come up with the	02:58PM
11		select syntax for "show lldp neighbors"?	02:58PM
12	MR. CANNON:	Objection; vague.	02:58PM
13	THE WITNESS:	It didn't take long to come up with	02:58PM
14		"show lldp neighbors" per se, but what took long was how	02:58PM
15		to -- how to make it exist with "show lldp."	02:58PM
16	BY MR. WONG:		02:59PM
17	Q	So approximately how long -- how much time did	02:59PM
18		you spend coming up with the command syntax for "show	02:59PM
19		lldp neighbors"?	02:59PM
20	MR. CANNON:	Objection; vague.	02:59PM
21	THE WITNESS:	For the initial proposals to	02:59PM
22		convince myself that this is even worth proposing, we	02:59PM
23		can say half an hour.	02:59PM
24	BY MR. WONG:		02:59PM
25	Q	And how long did it take for you to come up with	02:59PM